

6. *Psychiatric Terminology and Classification.*—The author deplors the present state of psychiatric terminology and classification and the frequency of new classifications which distract the student of psychiatry. He is much disturbed because there is as yet no universal classification and lays the blame upon the fact that our knowledge on the subject is so imperfect, that the requisites for a proper classification are wanting, or that there is an essential difference between psychiatry and other scientific departments. He admits the great difficulties to be encountered. He leaves the classification to psychologists, but unfortunately little that is practical has come from such sources. He ignores the fact that what is needed is a classification more suited for medical purposes. He disputes the idea that we can have "so-called varieties of insanity" as dementia præcox, and from a theoretical standpoint combats the use of "dementia" in both dementia præcox and senile dementia. The stand taken that all other forms of insanity, if not cut off by intercurrent illness, end in dementia is difficult to comprehend. Also we can get little help from the proposed method of classifying insanity according to duration and intensity. For the former the terms "recent—sub-chronic—chronic" for periods of three, six and twelve months, and for the latter "acute, sub-acute and mild" are proposed.

7. *Not suitable for abstracting.*

8. *Incidence of Tuberculosis in Asylums.*—The author at the outset, combats the prevalent idea that insane asylums are hot-beds for the growth and spread of tuberculosis. From statistics it would seem that the proportion of deaths by tuberculosis to deaths due to other diseases was lower in asylums than in population outside. Poverty, unhealthy hygienic surroundings and alcoholic excesses, factors potent in producing tuberculosis in the general population, have no influence inside of hospitals.

Evidence deduced from post-mortem findings go to prove that the tubercular bacillus is not spread in asylums. The symptoms of tuberculosis in the insane were different from those in other classes of patients. Wasting, irritability at times coughing are present, but patients seldom expectorate and seldom have hemoptysis. The author also states that the physical signs in the insane are different to some extent from other classes of patients and more difficult to recognize. In the discussion of this paper which follows, many important points, such as ventilation and general hygiene in insane hospitals were brought forward, special attention being given to segregation of the tuberculous insane.

9. *Not suitable for abstracting.*

10. *Continued article.*

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### Brain

(Vol. XXIX. No. 113, 1906.)

1. Upon the Orientation of Points in Space by the Muscular Arthrodial and Tactile Senses of the Upper Limbs in Normal Individuals and in Blind Persons. R. T. SLINGER and SIR VICTOR HORSLEY.
2. Notes on the Tania Pontis. SIR VICTOR HORSLEY.
3. The Mental Symptoms of Cerebral Tumor. PHILIP COOMBS KNAPP.
4. A Study of the Minute Structure of the Olfactory Lobe and Cornu Ammonis, as Revealed by the Pseudo-vital Methods (with remarks on the Plan of the Nervous Structure of Vertebrates in General. JOHN TURNER.
5. The Abdominal Reflex in Typhoid Fever. J. D. ROLLESTON.
6. A Family in which Some of the Signs of Friedreich's Ataxy Appeared Discretely. ERIC GARDNER.
7. Note on Apparent Re-representation in the Cerebral Cortex of the Types of Sensory Representation as it Exists in the Spinal Cord. COLIN K. RUSSEL and SIR VICTOR HORSLEY.

1. *Orientation of Points in Space.*—This study comes to the conclusions that (1) the faculty of orientation in space, as determined by the muscular and arthrodial sense, progressively diminishes from the surface of the body outwards to the limits of the arm extended in any direction, (2) orientation knowledge increases in passing from point to point in the space around the body, beginning above the head, coming down to the front of the body, and gradually approaching the centre of gravity of the whole body, (3) orientation knowledge also increases in passing from point to point in the space around the body, beginning laterally, *c. g.*, in the plane of the shoulder, and approaching the mesial sagittal plane of the body.

2. *Note on the Tenua Pontis.*—It is first brought out that this bundle of fibers is rarely symmetrical. This is particularly so in the lower animals and the suggestion is hazarded that should this asymmetry turn out to be universal in view of recent work that has been done on the relation of asymmetry and the occurrence of rotatory courses and movements in quadrupedal as well as bipedal animals. Horsley believes it to be a constant structure. It is a ponto-cerebellar tract and is a localized bundle of association fibers, uniting a portion of the frontal border of the pontine gray matter with that of the cerebellum, apparently the nucleus dentatus. The direction of the fibers is cerebello-petal as demonstrated by degeneration methods.

3. *Mental Symptoms of Cerebral Tumor.*—Knapp presents an exhaustive and valuable study on this subject using as a basis, the clinical histories of 104 patients in whom a growth of some nature was found on autopsy. In 75 per cent. of the cases, mental symptoms were noted, a rigid analysis however, made it imperative to revise this figure since alcoholism, typhoid, or other complicating feature existed. Thus, in 64 cases considered as representing true tumor states, at least 90 per cent. were found to show mental symptoms. Knapp believes his statement of some fourteen years previous by "that in every case some change can be found" and "that there can be no gross lesion in the brain without some disturbance, greater or less, in the psychical functions" receives further support by his later experience. As for the mental changes noted Knapp agrees with Schuster. The largest number 31 in all, presented the recognized type of mental dulness and failure. Languor, somnolence, dulness, apathy, mental torpor, failure of memory, and a general failure of all the mental functions, ending usually in complete stupor and coma were exhibited. Seven patients showed confusion and disorientation with failure of memory, irrelevancy in speech, mild mental wandering, somnolence, stupidity and a dazed condition. In 15 there was delirium often with hallucinations. Neurasthenic and hysterical states were occasionally noted in the earlier stages of the disease, but nearly always developed more marked mental disturbances. The mental symptoms showed themselves early in about one-half of the cases. As to the relation of the symptoms to the site of the tumor Knapp shows that five of the six cases of tumor of the frontal lobe, or to speak more accurately, of the prefrontal portion thereof, exhibited signs of mental disturbance. In all cases this disturbance was simple mental failure with marked dulness, but in only three of the cases was it noted as being among the early symptoms. The only case where no mental symptoms were noted was a sarcoma, the size of an English walnut, at the foot of the left second frontal convolution near the precentral sulcus. It is curious, he remarks, that this is the only case of tumor of the prosencephalon or diencephalon in which no mental symptoms were recorded, but mental dulness may readily have been overlooked, as the patient was in bed for a number of weeks, complaining constantly of intense headache and therefore averse to any conversation. Of four tumors in the Rolandic region, two presented symptoms of mental dulness early in their course, a third later in the dis-

case was noisy and delirious, and the fourth finally developed hallucinations and delusions of persecution. One of the two parietal cases presented neurasthenic symptoms early in the disease; the other became dull and stupid toward the close. There were six temporal tumors. Two of these were mentally dull, two confused, one delirious, and one presented a typical picture of general paralysis. One of the dull cases did not show much change till late in the disease; in all the rest the symptoms were of early occurrence. Every one of the three callosal tumors showed mental symptoms early in the disease, and all became confused, delirious, violent and demented. One case had hallucinations. Seven out of nine cases of a growth in the optico-striate region were mentally dull, but only two showed this symptom early. Two other cases showed early mental symptoms and both became delirious, one wildly maniacal. Two cases of tumor of the corpora quadrigemina became dull early and the third also showed early mental impairment with delusions of persecution. One of them manifested early various neurasthenic symptoms, scrupulosity and a sense of unworthiness, later growing demented. The other case of tumor was mentally dull. Five out of seven cerebellar tumors were mentally dull, but only one showed this mental failure early. The sixth was delirious; in the seventh case no mental symptoms were noted, but she had headaches with intense vertigo, aggravated by any effort, so that mental symptoms may well have been overlooked. One tumor of the hypophysis showed mental confusion early in the disease; the second was delirious toward the close. Of seven tumors at the base of the brain, five were in the anterior fossa. Of these, one became dull early, three showed mental confusion later in the disease, and a fifth was delirious, showing mental disturbance early. One patient with tumor in the middle fossa became delirious later in the disease. In only one case of a tumor in the posterior fossa, a growth of the cerebello-pontine angle, not involving the brain deeply, there were no noteworthy mental symptoms.

Eleven tumors were classed as multiple, but two other cases might fairly be regarded in this class, one a multiple growth in the optico-striate region, the other a multiple growth in the pons. Three of the eleven cases showed mental failure late in the disease. One was confused early and three were delirious. One of them showed mental disturbances early; one was mentally depressed. Of the three cases where no mental symptoms were recorded, two were under observation a very short time, one dying suddenly with cysticerci in the brain, the other dying suddenly of surgical shock. A third case with multiple gliomata in the basal ganglia has already been reported. In one other case with mental failure the autopsy record of the findings in the brain was lost, the only note being "glioma of the brain."

4. *Minute Structure of Olfactory Lobe.*—The author first details the improvements in his technique which should be consulted in the original. The structures of the bulb as stained by his method show considerable similarities to the structures of the cerebellum and the homology of these organs is pointed out. In homologizing the cornu Ammonis and the fascia dentata with the pallium, Turner speaks of the stratum oriens corresponding to the fusiform or spindle cell layer; the stratum pyramidulum and stratum radiatum to the large pyramidal layer and the stratum lacunosum to the second or small pyramidal layer. Turner believes in the neurofibril and its continuity and suggests some features of the reflex arc integrations and the integrations of the nerve system in general along the general hypothesis of the continuity of the neurofibrils.

5. *The Abdominal Reflex in Typhoid Fever.*—Observations in 45 patients having typhoid fever, in 93.3 per cent. there were variations in the abdominal reflex. It was completely lost in 68.8 per cent., impaired in a greater or lesser degree in 22.2. Unaffected in three cases only. The

reflex resumes its activity as convalescence becomes established. The author summarizes his result as follows: (1) The abdominal reflex is affected in a very large number of cases of enteric fever, the percentage of cases in which it is entirely lost exceeding those in which its normal activity is diminished only. (2) From its absence under 50 by being confined to certain nervous diseases and acute abdominal disorders, notably appendicitis and enteric fever, the absence of the abdominal reflex in a given case of continued pyrexia in any patient below 50 is of considerable diagnostic value. (3) The comparatively transient nature of the affection of the abdominal reflex in enteric fever is a striking contrast to the more chronic affection of the knee and ankle-jerks in diseases associated with peripheral neuritis, *e. g.*, diphtheria. (4) Return of a lost reflex, and a *fortiori* resumption of its normal activity, are a valuable indication of commencing convalescence, and often correspond with lysis and characteristic changes in the feces and urine. (5) The objective sign of the return of the reflex is often associated with the return of the subjective feeling of ticklishness normal to the individual. (6) In re-appearance of pyrexia in convalescence, the condition of the abdominal reflex is a valuable index of the nature of the pyrexia. (7) No constant relation exists between the condition of the abdominal reflex and that of the tendon reflex. (8) The frequency, degree, and duration of impairment of the abdominal reflex are usually in proportion to the age of the patient.

6. *Friedreich's Ataxia*.—The author gives an extensive literary survey of the cases of Friedreich's occurring in more than one member of the family and reports a new family. The mother showed nystagmus, tremor, spasticity and increased knee-jerks. There were six daughters. One showed spasticity, nystagmus, clubfoot, increased knee-jerks, and changed speech; a second had scoliosis and absent knee-jerk, but is otherwise normal; a third, child is normal, as is the fourth; the fifth child, has no knee-jerk, *pes cavus* is present. The youngest child is normal. He discusses the anomalous character of the illness, but prefers to group them as a family disease showing some of the signs of Friedreich's disease without specifying just where the present cases belong.

7. *Sensory Re-representation in the Cortex*.—The authors put forward the thesis that the spinal representation of tactility finds an echo in the arrangement of that function in the sensory cerebral cortex. They first review the three classes of views on sensory representation in the pallium so far as they relate to the kinds of sensation represented, *i. e.*, (1) Representation of sensation of any kind in the pallial kinesthetic area, (2) Representation of tactile sensation elsewhere in the pallium as well as in the kinesthetic cortex, and (3) No representation of sensation in the kinesthetic cortex. Evidence from the clinical side is adduced which the authors say up to the present time has sustained the views of Mills and Campbell that the post-central region is essentially the seat of sensory (tactile?) representation, and that all the instances of apparent lesion of the ascending frontal gyrus only are probably vitiated by associated disorders of the ascending parietal convolution, and finally that the corresponding "sensory" centers are arranged horizontally behind the "motor" centers.

The authors proceed then to draw attention to an additional type according to which tactility and topognosis appear to be also represented in the cortex cerebri, *viz.*, a type which is apparently a re-representation of that according to which tactility is represented in the spinal cord. The representation of tactility in the spinal cord which is essentially a metamerically-divided organ is readily mapped out, and the terminology descriptive of the topographical mapping of tactility in at any rate the hand and forearm was originally laid down by Ross from clinical observations and by Paterson from consideration of embryological an-

atomy, while since that preliminary epoch the subject of spinal sensory representation has been exhaustively examined by Sherrington and by Head, with the result that the topographical areas of the different spinal roots are now well defined. The conclusion reached is that it is perfectly clear that what may properly be termed the mid-axial line and region of the hand and forearm is as definitely represented in the cerebral pallium as it distinctly is in the spinal cord. It is perhaps natural to expect that this should be so, because any contrast between the post-axial and pre-axial portions of the limbs respectively, presupposes an imaginary frontier line between them, and further, the cerebral memorialisation of the transfer of the limb to and from the mesial plane of the body demands that the cerebral pallium should have particularly localized within it the orientation of the middle point of the limb which is thus translated from or to the sagittal mesial plane. This further proof of similarity between the sensory representation in the spinal cord and cerebral pallium is confirmatory of the other phenomena described.

Jelliffe

### Deutsche Zeitschrift für Nervenheilkunde.

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1. The Symptomatology of Hemiplegia. HEILBRONNER.
2. The Status Hemiepilepticus Idiopathicus; Eight Clinical and Anatomical Observations. MÜLLER.
3. A New Algesimeter, with a Critical Description of the Previous Algesimetric Methods. THUNBERG.
4. Tumor of the Hypothesis Without Akromegaly. KOLLARITS.

1. *Hemiplegia*.—Upon the cadaver it may be observed that the outer contour of the thighs is more convex than during life. The same appearance may also be observed in the affected leg in cases of recent hemiplegia. A somewhat similar appearance may be observed in the calf and arm muscles. Heilbronner calls this condition "the broad leg." It is not present in sleep, nor in unconsciousness, nor in profound narcosis. It is present in severe acute polyneuritis, but was not found in tabes, in chorea, in Huntingdon's disease, or in hysterical flaccid hemiplegia. It is not certain that it will serve in the differential diagnosis of cerebral and spinal hypotonia. The broad leg is not dependent upon the disappearance of the patellar reflex, or even upon the return of voluntary movement; but if it persists the contractibility of the quadriceps to percussion upon its tendon is usually lost. After some discussion of the reflexes and muscle tone Heilbronner reaches the conclusion that in the course of recovery from hemiplegia the following series of events occurs. First, return of active motion; second, return of the contour-preserving tone; third, the return of the reflex muscle tone. With reference to certain other clinical phenomena he states his belief that the superior restoration of the function of the leg is merely apparent. He also discusses the hemiplegic gait, and calls attention to the importance of educating hemiplegics how to walk properly. He describes a curious form of rhythmical movements of the arm during walking, which are entirely involuntary. They consist of a flexion and lifting of the forearm, and may occur when apparently all the symptoms of hemiplegia have disappeared.

2. *Status Hemiepilepticus*.—Although it is generally supposed that partial or Jacksonian epilepsy is due to some focal lesion in the brain, a number of observations have been recorded in which such partial epilepsy has existed although examination of the brain has been entirely negative. Müller collects from the service of Nonne eight cases of partial epilepsy. The first, an alcoholic and leutic man of 26, who had had an injury to the head. There was left-sided status epilepticus not relieved by trephining. The macroscopical examination of the brain was negative; apparently a microscopical examination was not undertaken. The second case, a